CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR PROPOSAL

			REQUISITION NUMBER	DUE DATE	TIME DUE
MDOT PROJECT MA	NAGER		JOB NUMBER (JN)	CONTROL SECTION (CS)	
DESCRIPTION					
in.	ANAGER: Check all i WHITE = REQUIRED ** = OPTIONAL e appropriate Tier in the		CONSULTANT: Provide only proposal when applicable, Best separately in the RFP. **Optional items are determined	Value scoring crite	ria is listed
TIER 1 (\$100,000 - \$250,000)	TIER II (\$250,000-\$1,500,000)	TIER III (>\$1,500,000)			
			Understanding of Service **		
N/A			Innovations		
			Organizational Chart		
			Qualifications of Team		
N/A	N/A		Quality Assurance/Quality Con	trol **	
			Location: The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.		
N/A	N/A		Presentation **		
N/A	N/A		Technical Proposal (if Presenta	ation is required)	
3 pages (MDOT Forms not counted) Resumes will only be accepted for Best Value Selections.	7 pages (MDOT Forms not counted)	14 pages (MDOT Forms not counted)			

PROPOSAL AND BID SHEET E-MAIL ADDRESS - mdot-rfp-response@michigan.gov

The Consultants will receive an e-mail reply/notification from MDOT when the proposal is received. Please retain a copy of this e-mail as proof that the proposal was received on time. Consultants are responsible for ensuring that MDOT receives the proposal on time.

* Contact Contract Services Division immediately at 517-373-4680 if you do not get an auto response.

GENERAL INFORMATION

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least five (5) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D – Request for Proposal Cover Sheet

5100J - Consultant Data and Signature Sheet (Required for all firms performing non-pregualified services on this project.)

(These forms are not included in the proposal maximum page count.)

MDOT 5100B (02/19) Page 2 of 2

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be developed and submitted in accordance with the latest Consultant/ Vendor Selection Guidelines for Services Contracts."

RFP SPECIFIC INFOR	MATION		
ENGINEERING SER	RVICES BURE	EAU OF TRANSPORTATION PL	ANNING OTHER
THE SERVICE WAS POS	TED ON THE ANTICIPATED QU	ARTERLY REQUESTS FOR PR	ROPOSALS
NO	YES	DATED	THROUGH
	ices – See the attached Scop requalification Classifications.	must make sure labor rates, overlis on file with This information all sub vendors s 5100J is require	that current financial information, including nead computations, and financial statements, MDOT's Office of Commission Audits. must be on file for the prime vendor and to that the contract will not be delayed. Form the deal with proposal for all firms performing its services on this project.

Qualification Based Selection - Use Consultant/Vendor Selection Guidelines.

For all Qualifications Based Selections, the selection team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

Qualification Based Selection / Low Bid – Use Consultant/Vendor Selection Guidelines. See Bid Sheet instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted. The vendor that has met established qualification threshold and with the lowest bid will be selected.

Best Value – Use Consultant/Vendor Selection Guidelines, See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

Low Bid (no qualifications review required – no proposal required.)

BID SHEET INSTRUCTIONS

Bid Sheet(s) are located at the end of the Scope of Services. Submit bid sheet(s) with the proposal, to the e-mail address: MDOT-RFP-Response@michigan.gov. Failure to comply with this procedure may result in your bid being rejected from from consideration. MDOT reserves the right to reject any and all bids.

PARTNERSHIP CHARTER AGREEMENT

MDOT and ACEC created a Partnership Charter Agreement which establishes guidelines to assist MDOT and Consultants in successful partnering. Both the Consultant and MDOT Project Manager are reminded to review the <u>ACEC-MDOTPartnership Charter Agreement</u> and are asked to follow all communications, issues resolution and other procedures and guidance's contained therein.

PROPOSAL REQUIREMENTS

Proposals must be submitted for this project electronically. Proposal submittal requirements are listed in *PART IV – INSTRUCTION FOR SUBMITTING PROPOSALS* at the following link Selection Guidelines for Service Contracts

FINANCIAL REQUIREMENTS FOR NON-PREQUALIFIED VENDORS

Financial Requirements for Non-Prequalified Consultants/Vendors

E-VERIFY REQUIREMENTS

E-Verify is an Internet based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of that employee to work in the United States. There is no charge to employers to use E-Verify. The E-Verify system is operated by the Department of Homeland Security (DHS) in partnership with the Social Security Administration. E-Verify is available in Spanish.

The State of Michigan is requiring, under Public Act 200 of 2012, Section 381, that as a condition of each contract or subcontract for construction, maintenance, or engineering services that the prequalified contractor or subcontractor agree to use the E-Verify system to verify that all persons hired during the contract term by the contractor or subcontractor are legally present and authorized to work in the United States.

Information on registration for and use of the E-Verify program can be obtained via the Internet at the DHS Web site: http://www.dhs.gov/E-Verify.

The documentation supporting the usage of the E-Verify system must be maintained by each consultant and be made available to MDOT upon request.

It is the responsibility of the prime consultant to include the E-Verify requirement documented in this NOTIFICATION in all tiers of subcontracts.

DIGITAL SIGNATURE OF CONTRACTS

On <u>January 4, 2018</u>, Contract Services Division implemented the use of CoSign as the exclusive software for digitally signing all consultant contracts and consultant contract related documents. All other digital signing methods are no longer accepted.

Prior to using CoSign, all external partners must apply for a free digital signature user account by submitting a MDOT Digital Signature Certificate Request Form.

MDOT INSURANCE UPDATED 3.9.17

At a minimum, the insurance types and limits identified below, may be required from the selected consultant, prior to contract award.

Required Limits	Additional Requirements	
Commercial General L	iability Insurance	
Minimal Limits: \$1,000,000 Each Occurrence Limit \$1,000,000 Personal & Advertising Injury Limit \$2,000,000 General Aggregate Limit \$2,000,000 Products/Completed Operations	Consultants must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds	
Automobile Liabil	ty Insurance	
Minimal Limits: \$1,000,000 Per Occurrence		
Workers' Compensa	tion Insurance	
Minimal Limits: Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.	
Employers Liabili	ty Insurance	
Minimal Limits: \$500,000 Each Accident \$500,000 Each Employee by Disease \$500,000 Aggregate Disease		
Professional Liability (Errors a	nd Omissions) Insurance	
Minimal Limits: \$1,000,000 Per Claim		

The Insurer shall provide at least thirty (30) days written notice of cancellation. The Prime Consultant will be responsible to verify subconsultant(s) compliance with MDOT's insurance requirements.

Michigan Department of Transportation

SCOPE OF SERVICE FOR AS-NEEDED DESIGN SERVICES

CONTROL SECTION(S): Various

JOB NUMBER(S): Various

PROJECT LOCATION:

This project is located on various routes in Oakland County.

PROJECT DESCRIPTION:

Work involved in this contract includes design services for preparing plans and proposal documents for as-needed design services. The consultant may be required to design American Disability Act (ADA) complaint sidewalk ramps, Capital Preventive Projects and other design related projects. In addition, the consultant may be required to assist in the completion of design projects currently in the design process.

The consultant shall work under the direction of the MDOT Project Manager. Design services will be performed on various projects. Additional projects may be added throughout 2019 and 2020, as directed by the MDOT Project Manager. Design services may be needed full time or at various given times, beginning May 1, 2019 through December 31, 2020.

The consultant shall contact the MDOT Project Manager prior to beginning any as needed design services.

MDOT reserves the right to request services on other projects located in the Region / TSC area that are not listed in Attachment C, under the conditions of this "as needed" scope of services.

Full time services will not be required on all projects at all times. This scope is for "as needed" services, based on the intermittent needs of MDOT. It must be noted that this is not a guarantee that MDOT will use the Consultant's services.

Up to two (2) Consultant will be chosen for the "as needed" contract.

ANTICIPATED SERVICE START DATE: May 1, 2019

ANTICIPATED SERVICE COMPLETION DATE: December 31, 2020

This selection is for an 8 month period.

DBE PARTICIPATION REQUIREMENT: 5%

PRIMARY PREQUALIFICATION CLASSIFICATION(S):

Design – Roadway: Intermediate

SECONDARY PREQUALIFICATION CLASSIFICATION(S):

Surveying: Right of Way Surveying: Road Design Design-Hydraulics II

Design-Traffic: Pavement Markings Design-Traffic: Safety Studies

Design-Traffic: Signal

Design-Traffic: Signal Operations Design-Traffic: Signing –Freeway Design-Traffic: Signing –Non-Freeway

Design-Traffic: Capacity and Geometric Analysis Design-Traffic: Work Zone Maintenance of Traffic Design-Traffic: Work Zone Mobility & Safety

Design-Utilities: Municipal

Design-Utilities: Roadway Lighting

Design-Utilities: Subsurface Utility Engineering

PREFERRED QUALIFICATIONS AND CRITERIA (FOR NON-CLASSIFIED SERVICES):

1) UTILITY COORDINATION

The Consultant and MDOT shall share responsibilities for project Utility Coordination. See attached "Scope of Services for Utility Coordination".

MDOT PROJECT ENGINEER MANAGER:

David Harrison, PE
Oakland Transportation Service Center
800 Vanguard Drive
Pontiac, MI 48341
248-451-2460
248-451-0050
harrisonD7@michigan.gov

CONSTRUCTION COST:

The estimated cost of construction varies.

2

REQUIRED MDOT GUIDELINES AND STANDARDS:

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Published MDOT Design Advisories, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

The Consultant is required to use the MDOT Current Version of Bentley MicroStation/GEOPAK or PowerGEOPAK (published at Section 2.2.2 of the Design Submittal Requirements) with the current MDOT workspace (published at Section 2.2.1 of the Design Submittal Requirements). 3D Models are required for all applicable projects. See Chapter 2 of the Design Submittal Requirements for a complete listing of applicable projects. The consultant shall comply with all MDOT CADD standards and file naming conventions.

MDOT RESPONSIBILITIES:

- A. Schedule and/or conduct the following:
 - 1. Project related meetings
 - 2. Base Plan Review
 - 3. The Plan Review
 - 4. Omissions/Errors/Check
 - 5. Utility Coordination Meeting(s) *Unless otherwise noted in the Scope of Service for Utility Coordination*
 - 6. Final AP Preconstruction item cost estimates
- B. Furnish pertinent reference materials.
- C. Furnish prints of an example of a similar project and old plans of the area, if available. Furnish the E.A.
- D. Obtain all permits for the project as outlined in previous section.
- E. Coordinate any necessary utility relocation(s) Unless otherwise noted in the Scope of Service for Utility Coordination
- F. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).

CONSULTANT RESPONSIBILITIES:

Complete the design of this project including, but not limited to the following:

The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job and perform field operations in accordance with the Department's Personal Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

- A. Perform design surveys.
- B. Prepare required plans, typical cross-sections, details, and specifications required for design and construction.
- C. Compute and verify all plan quantities.
- D. Prepare staging plans and special provisions for maintaining traffic during construction.
- E. The Consultant may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.
- F. If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Project Area Contamination Survey (PACS).
- G. The Consultant shall prepare and submit in ProjectWise (in PDF format) a CPM network for the construction of this project.
- H. The Consultant representative shall record the minutes and submit in ProjectWise (in PDF format), for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for The Plan Review Meeting.
- I. The Consultant will provide to MDOT, by entering into MDOT ProjectWise at the scheduled submittal dates, electronic documents (in PDF format) of the required specifications and plan set materials for distribution by MDOT for all reviews for this project.

- J. Prepare and submit electronically (native format or PDF) into MDOT ProjectWise, any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (i.e. county drain commission) and related mitigation. MDOT will submit permit requests.
- K. Attend any project-related meetings as directed by the MDOT Project Manager.
- L. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, etc.
- M. The MDOT Project Manager shall be the official MDOT contact person for the Consultant and shall be made aware of all communications regarding this project. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.
- N. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.
- O. The Consultant shall be responsible for obtaining and showing on the plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility Coordinator and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project.
- P. The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Scope of Design Services.
- Q. The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW).

 This information can be obtained through Utilities/Permits in the Development Services Division
- R. On the first of each month, the Consultant Project Manager shall submit in ProjectWise a monthly project progress report to the Project Manager.

DELIVERABLES:

The Consultant shall enter in MDOT ProjectWise, in the appropriate folders all electronic files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, Roadway Templates etc.) as directed by the MDOT Project Manager or as part of each milestone submittal at a minimum. All CADD/GEOPAK files shall be created and identified with standard MDOT file names. It is the Consultant's responsibility to obtain up to date MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are published monthly to the MDOT website. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Proposal documents shall be submitted, to MDOT ProjectWise, in the appropriate folders, in their native format with standard naming conventions as well as combined into one PDF file in the sequence specified by MDOT. To provide text search capabilities the combined proposal shall be created by converting native electronic files to PDF. Scanning to PDF is discouraged except in instances where it is necessary to capture a legally signed document or a hard copy version of a document is all that exists.

Plan sheets shall be submitted to MDOT ProjectWise in the appropriate folders in a set in PDF 11" x 17" format. For final Plan Turn-In, a title sheet shall be printed, signed, sealed, and then scanned for inclusion with the PDF set. The original title sheet shall be sent to the MDOT Project Manager

Reference Information Documents (RID) shall be entered into MDOT ProjectWise in the appropriate folder with standard naming conventions and content at milestone submittals as defined by <u>Chapter 4</u> of the <u>Design Submittal Requirements</u>. The RID files included will depend on the design survey deliverables and project template (See <u>Chapter 2</u> of the <u>Design Submittal Requirements</u>). These files could include but are not limited to: CADD, existing terrain, proposed cross sections, 3D models and files generated for Automated Machine Guidance (AMG) and automated inspection/stakeout activities.

Stand Alone Proposal Estimator's Worksheet (SAPW) or the Project Quantity Spreadsheet (PQS) shall be used to generate the xml files necessary for import into the AP Preconstruction bid letting software. The .xml files shall be entered into MDOT ProjectWise in the appropriate folder.

The project removal, construction, and profile sheets will require a scale of 1"=80' or as approved by the Project Manager. See Section 1.02.12 of the Road Design Manual for further direction.

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager. All plans, specifications, and other project related items are subject to review and approval by MDOT.

PROJECT SCHEDULE:

The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant's Monthly Progress Reports.

MDOT Preconstruction Tasks Consultant Checklist Planisware Form Only

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

Version 15 Updated 09-11-2017

For questions on specific tasks, refer to the Preconstruction Task Manual located on the <u>MDOT Website</u>. For assistance in accessing this manual, please contact:

Dennis Kelley: (517) 373-4614

Please indicate with a check in the box next to each task number whether you believe that task will require consultant involvement on the job. Milestones (a specific event at a point in time) are italicized and underlined. See the Preconstruction Task Manual for more details. Scheduling assistance may be accomplished with estimated completion dates. While not part of Planisware, an Authorization Milestone and Post-Design Tasks have been included for your reference.

STUDY (EARLY PRELIMINARY ENGINEERING)

·		PRECONSTRUCTION TASK NUMBER AND DESCRIPTION		DATE TO BE COMPLETED BY (mm/dd/yyyy)		
YES	NO	CON	SULTANT CONTRACT AUTHORIZATION/EXECUTION	/	/	
163	NO	INFORI	MATION GATHERING/STUDIES			
		1115	Traffic Data Collection for Studies	/	/	
		1120	Prepare Traffic Analysis Report for Studies	/	/	
		1125	Traffic Capacity Analysis for Studies	/	/	
		1155	Request/Perform Safety Analysis for Studies	/	/	
		1300	Traffic Impact Study	/	/	
		1350	Determine Need for Interstate Access Change Request	/	/	
		1400	Feasibility Study	/	/	
		1500	Corridor Study	/	/	
		1555	Interstate Access Change Request	/	/	
		<u>155M</u>	FHWA Approval of Interstate Access Change Request	/	/	
		1600	Access Management Study Plan	/	/	
		1700	Other Miscellaneous Studies	/	/	
		EPE SC	COPING ANALYSIS			
		2100	Scope Verification and Initiation of EPE Activities	/	/	
		2115	Prepare Traffic Analysis Report for EPE/Design	/	/	
		2120	Traffic Data Collection for EPE/Design	/	/	
		2125	Traffic Capacity Analysis for EPE/Design	/	/	
\boxtimes		2130	Prepare Project Purpose and Need	/	/	
		<u>213M</u>	Concurrence by Regulatory Agencies with the Purpose and Need	/	/	
		2140	Develop and Review Illustrative Alternatives	/	/	
\boxtimes		2155	Request/Perform Safety Analysis for EPE/Design	/	/	
		2160	Prepare and Review EIS Scoping Document	/	/	
		<u>216M</u>	Public Information Meeting	/	/	

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

STUDY (EARLY PRELIMINARY ENGINEERING) (cont'd)

YES	NO	PRECONSTRUCTION TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)	
		EPE DRAFT ANALYSIS	(****** 2.2.,),),	,
		2310 Conduct Technical SEE Studies	/ /	
		2311 Cultural Resources Survey	/ /	
		2312 Recreational Survey – Section 4(f)/6(f)	/ /	
		EPE DRAFT ANALYSIS (cont'd)		
		2313 Endangered Species Survey	/ /	
		2314 Wetland Assessment	/ /	
		2315 Wetland Mitigation	/ /	
		2316 Other Technical Reports	/ /	
		2321 Prepare for Aerial Photography	/ /	
		2322 Finish/Print Aerial Photography	/ /	
		2330 Collect EPE Geotechnical Data	/ /	
		2340 Develop and Review Practical Alternatives	/ /	
		233M Aerial Photography Flight	/ /	
		2360 Prepare and Review EA	/ /	
		236M Approval of EA by FHWA	/ /	
		2370 Prepare and Review Draft EIS	/ /	
		237M Approval of Draft EIS by FHWA	/ /	
		2380 Distribute EA	/ /	
		238M Public Hearing for EA	/ /	
		2390 Distribute DEIS	/ /	
		239M Public Hearing for DEIS	/ /	
		EPE FINAL ANALYSIS		
		2510 Determine and Review Recommended Alternative	/ /	
		250M Concurrence by Reg Agencies with Recom Alternatives	/ /	
		2525 Prepare and Review Engineering Report	/ /	
		2530 Prepare and Review Request for FONSI	/ /	
		252M Approval of FONSI by FHWA	/ /	
		2540 Prepare and Review FEIS	/ /	
		254M Approval of FEIS by FHWA	/ /	
		2550 Obtain ROD	/ /	
		255M ROD Issued by FHWA	/ /	
		2570 ITS Concept of Operations	/ /	
		CONTAMINATION INVESTIGATION		
		2810 Project Area Contamination Survey (PCS)	/ /	
		2820 Preliminary Site Investigation (PSI) for Contamination	/ /	

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

PRELIMINARY ENGINEERING - DESIGN

YES NO		PRECONSTRUCTION TASK NUMBER AND DESCRIPTION			DATE TO BE COMPLETED BY (mm/dd/yyyy)		
. 20	110	DESIG	N SCOPE VERIFICATION AND BASE PLAN	(11111)	*/ y y y y <i>)</i>		
			ARATION				
\boxtimes		3130	Verify Design Scope of Work and Cost	/	/		
		3310	Prepare Aerial Topographic Mapping	/	/		
		3320	Conduct Photogrammetric Control Survey	/	/		
		3321	Set Aerial Photo Targets	/	/		
		3325	Geotechnical Structure Site Characterization	/	/		
\boxtimes		3330	Conduct Design Survey	/	/		
		3340	Conduct Structure Survey	/	/		
		3350	Conduct Hydraulics Survey	/	/		
\boxtimes		3360	Prepare Base Plans	/	/		
		<u>311M</u>	Utility Notification	/	/		
		3365	Pre-Conceptual ITS Design and Meeting	/	/		
		3370	Prepare Structure Study	/	/		
		3375	Conduct Value Engineering Study	/	/		
\boxtimes		3380	Review Base Plans	/	/		
		3385	Preliminary Load Rating	/	/		
\boxtimes		332M	Base Plan Review (Pre-GI Inspection)	/	/		
\boxtimes		3390	Develop the Maintaining Traffic Concepts	/	/		
		PRELII	MINARY PLANS PREPARATION				
\boxtimes	П	3500	Develop Transportation Management Plan	/	/		
		3510	Perform Roadway Geotechnical Investigation	/	/		
\boxtimes		3520	Conduct Hydraulic/Hydrologic and Scour Analysis	/	/		
\boxtimes		3522	Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	/	/		
		3530	Geotechnical Foundation Engineering Report	/	/		
		3535	Conduct Str. Review for Arch. & Aesthetic Improvements	/	/		
\boxtimes		3540	Develop the Maintaining Traffic Plan	/	/		
\boxtimes		3551	Prepare/Review Preliminary Traffic Signal Design Plan	/	/		
\boxtimes		3552	Develop Preliminary Pavement Marking Plan	/	/		
\boxtimes		3553	Develop Preliminary Non-Freeway Signing Plan	/	/		
\boxtimes		3554	Develop Preliminary Freeway Signing Plan	/	/		
\boxtimes		3555	Prepare/Review Preliminary Traffic Signal Operations	/	/		
		3570	Prepare Preliminary Structure Plans	/	/		
\boxtimes		3580	Develop Preliminary Plans	/	/		
		3585	Final ITS Concept Design and Meeting	/	/		
\boxtimes		3590	Review The Plans	/	/		
\boxtimes		352M	THE Plan Review Meeting	/	/		
		3595	Conduct ITS Structure Foundation Investigation	/	/		

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

PRELIMINARY ENGINEERING - DESIGN (cont'd)

		PRECONSTRUCTION TASK NUMBER AND DESCRIPTION	DATE TO B COMPLETED	BY
YES	NO		(mm/dd/yyyy	y)
_	_	<u>UTILITIES</u>		
\boxtimes		3610 Compile Utility Information	/ /	
		3615 Compile ITS Utility Information	/ /	
		3650 Coordinate RR Involvement for Grade Separations	/ /	
		3655 Coordinate RR Involvement for At-Grade Crossings	/ /	
\boxtimes		3660 Resolve Utility Issues	/ /	
\boxtimes		360M Utility Conflict Resolution Plan Distribution	/ /	
\boxtimes		361M Utility Meeting	/ /	
\boxtimes		3670 Develop Municipal Utility Plans	/ /	
\boxtimes		3672 Develop Special Drainage Structures Plans	/ /	
		3675 Develop Electrical Plans	/ /	
		3680 Preliminary ITS Communication Analysis	/ /	
		3690 Power Design (Power Drop in Field)	/ /	
		MITIGATION/PERMITS		
\boxtimes		3710 Develop Required Mitigation	/ /	
		3720 Assemble Environmental Permit Applications	/ /	
		3730 Obtain Environmental Permit	/ /	
		FINAL PLAN PREPARATION		
		3815 Geotechnical Structure Design Review	/ /	
\boxtimes		3821 Prepare/Review Final Traffic Signal Design Plan	/ /	
\boxtimes		3822 Complete Permanent Pavement Marking Plan	/ /	
\boxtimes		3823 Complete Non-Freeway Signing Plan	/ /	
\boxtimes		3824 Complete Freeway Signing Plan	/ /	
\boxtimes		3825 Prepare/Review Final Traffic Signal Operations	/ /	
\boxtimes		3830 Complete the Maintaining Traffic Plan	/ /	
\boxtimes		3840 Develop Final Plans and Specifications	/ /	
\boxtimes		380M Plan Completion	/ /	
		3850 Develop Structure Final Plans and Specifications	/ /	
\boxtimes		3870 Hold Omissions/Errors Check (OEC) Meeting	/ /	
		3875 Final Load Rating	/ /	
\boxtimes		387M Omissions/Errors Checks Meeting	/ /	
\boxtimes		389M Plan Turn-In	/ /	
		3880 CPM Quality Assurance Review	/ /	
		3890 Final ITS Communication Analysis	/ /	

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

PRELIMINARY ENGINEERING - RIGHT OF WAY

NO	PRECONSTRUCTION TASK NUMBER AND DESCRIPTION	COMPLE	TED BY
NO	EADLY DICHT OF WAY WORK	(IIIII)/uc	уууу)
_			
	4100 Real Estate Pre-Technical Work (combines 411M, 4120)	/	/
	4150 Real Estate Technical Work (combines 4130, 4140)	/	/
	413M Approved Marked Final ROW	/	/
	ROW APPRAISAL 4350 Real Estate Appraisals (combines 4411, 4412, 4413, 4420)	1	/
	ROW ACQUISITION		
	4450 Real Estate Acquisitions (combines 4430, 4710, 4720)	/	/
	4510 Conduct Right Of Way Survey & Staking	/	/
	442M ROW Certification	/	/
	NO	NO EARLY RIGHT OF WAY WORK 4100 Real Estate Pre-Technical Work (combines 411M, 4120) 4150 Real Estate Technical Work (combines 4130, 4140) 413M Approved Marked Final ROW ROW APPRAISAL 4350 Real Estate Appraisals (combines 4411, 4412, 4413, 4420) ROW ACQUISITION 4450 Real Estate Acquisitions (combines 4430, 4710, 4720) 4510 Conduct Right Of Way Survey & Staking	NO EARLY RIGHT OF WAY WORK 4100 Real Estate Pre-Technical Work (combines 411M, 4120) / 4150 Real Estate Technical Work (combines 4130, 4140) / 413M Approved Marked Final ROW / ROW APPRAISAL 4350 Real Estate Appraisals (combines 4411, 4412, 4413, 4420) / ROW ACQUISITION 4450 Real Estate Acquisitions (combines 4430, 4710, 4720) / 4510 Conduct Right Of Way Survey & Staking /

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

POST LETTING/AWARD TASKS (for reference only)

YES	NO	PRE	ECONSTRUCTION TASK NUMBER AND DESCRIPTION	DATE COMPLE	TED BY
		4810	Complete Acquisition Process	/	/
			·	,	,
Ш	Ш	4820	Manage Excess Real Estate	/	/
		4830	Provide Post-Certification Relocation Assistance	/	/
		4910	Conduct ROW Monumentation	/	/
		5010	Construction Phase Engineering and Assistance	/	/
		5020	Prepare As-Built Drawings	/	/

CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee: As-Needed

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment will include labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee. The fixed fee for profit allowed for this project is 11.0% or less of the cost of direct labor and overhead.

This scope is for "as needed" services. As such, the hours provided are only an estimate.

When separate, individual contracts are subsequently authorized for stand-alone work as part of this selection, the Consultant will be entitled to the maximum fixed fee as negotiated during scope/fee negotiations for the stand-alone contract, after the work is completed to the satisfaction of MDOT.

The Consultant will be reimbursed a proportionate share of the fixed fee based on the portion of the authorized total hours in which services have been provided to the Department where separate, individual contracts are not authorized for stand-alone work. Fixed fee on these as needed projects is computed by taking the percent of actual labor hours invoiced to labor hours authorized, then applying that percentage to the total fixed fee authorized.

All billings for services must be directed to the Department and follow the current guidelines. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

MDOT will reimburse the consultant for vehicle expenses and the costs of travel to and from project sites in accordance with MDOT's Travel and Vehicle Expense Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final_Travel_Guidelines_05-01-13_420289_7.pdf?20130509082418. MDOT's travel and vehicle expense reimbursement policies are intended primarily for construction engineering work. Reimbursement for travel to and from project sites and for vehicle expenses for all other types of work will be approved on a case by case basis.

MDOT will pay overtime in accordance with MDOT's Overtime Reimbursement Guidelines,

dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final Overtime Guidelines 05-01-13_420286_7.pdf?20130509081848. MDOT's overtime reimbursement policies are intended primarily for construction engineering work. Overtime reimbursement for all other types of work will be approved on a case by case basis.

MDOT reserves the right to request services on other projects located in the Region/TSC area that are not listed above, under the conditions of this "as needed" scope of services.

Full time services may not be required on all projects at all times. This scope is for "as needed" services, based on the intermittent needs of MDOT. It must be noted that this is not a guarantee that MDOT will use the Consultant's services.

Multi-Vendor As-Needed Service Consultant Work Order Selection Process

The most qualified vendor will be determined by the MDOT Project Manager based upon the initial as-needed services RFP solicitation response provided by the vendor.

ATTACHMENT A

SCOPE OF SERVICE FOR DESIGN SURVEYS

Version: June 2016

TYPE OF SURVEY:

Χ	Surveying: Road Design (3330)						
	Surveying: Structure (3340)						
	Surveying: Hydraulics (3350)						
Χ	Surveying: Right of Way (4510)						

(Work in any of the above Survey Services Categories must be completed by a survey firm which is pre-qualified by MDOT for that category.)

GENERAL REQUIREMENTS:

- 1. Surveys must comply with **all Michigan law** relative to land surveying.
- 2. Surveys must be done under the **direct supervision** of a Professional Surveyor licensed to practice in the State of Michigan.
- 3. The selected Survey Consultant must discuss the scope of this survey with an MDOT Survey Consultant Project Manager or an MDOT Region Surveyor before submitting a project specific priced proposal.
- 4. The selected Survey Consultant must contact the Region or TSC Traffic and Safety Engineer for work restrictions and traffic control requirements. Costs for traffic control must be included in the priced proposal in order to be reimbursed as a direct cost.
- 5. A **detailed Survey Work Plan <u>must</u>** be included with each project specific priced proposal. A **spreadsheet estimate** of hours by specific survey task such as horizontal control, leveling, mapping, alignment determination, etc., <u>must</u> be included in each project specific priced proposal.
- 6. It is the responsibility of the Survey Consultant to safeguard all corners of the United States Public Land Survey System, published Geodetic Control and any other Property Controlling corners that may be in danger of being destroyed by the proposed construction project.
- 7. Surveys must meet all requirements of the *MDOT Design Surveys Standards of Practice* (link: http://mdotwiki.state.mi.us/design/index.php/Chapter_1_-
 Survey Manual Introduction). Please contact the MDOT Design Survey Support Unit to clarify any specific questions regarding these standards.
- 8. Survey Consultants must obtain all necessary permits required to perform this survey on any public and/or private property, including an up-to-date permit from the MDOT

- Utilities Coordination and Permits Section.
- 9. Prior to performing the survey, the Survey Consultant must contact all landowners upon whose lands they will enter in accordance with the *MDOT Design Surveys Standards of Practice*. A template letter can be found here: http://mdotwiki.state.mi.us/design/index.php/File:EXAMPLE Right of Entry.pdf
- 10. The Survey Consultant must contact any and all Railroads prior to commencing field survey on railroad property. The cost for any permit, flaggers and/or training that is required by the Railroad will be considered as a direct cost, but only if included in the Survey Consultant's priced proposal.
- 11. The Survey Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job.
- 12. The MDOT Project Manager is the official contact for the Survey Consultant. The Survey Consultant must send a copy of all project correspondence to the MDOT Project Manager. The MDOT Project Manager shall be made aware of all communications regarding this project. Any survey related questions regarding this project should be directed to an MDOT Survey Consultant Project Manager or MDOT Region Surveyor. **The MDOT Project Manager must be copied on any and all correspondence.**

SURVEY PROJECT LIMITS:

If specific survey limits are not included, then the Survey Consultant must develop the survey limits based on the needs of the design team. A description of survey limits detailing length, width and cross roads must be included in the Survey Work Plan.

RESEARCH:

Survey Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project. The MDOT Design Survey Support Unit is available to assist in researching MDOT records.

CONTROL:

If not specified in this scope, Primary and Intermediate Horizontal Control Points and Benchmarks established for this project must meet the requirements specified in Chapter 3 of the MDOT Design Surveys Standards of Practice.

The Horizontal and Vertical datums and coordinate system must be clearly stated in the Survey Work Plan and subsequent submittals. For acceptable datums and coordinate systems refer to Chapter 3 of the MDOT Design Surveys Standards of Practice.

ALIGNMENT & ROW:

If not defined in this scope, the use of either a Legal or Non-legal Alignment and ROW must be determined from the needs of the design team. If it is determined that MDOT will need to acquire additional ROW with partial takes, then the **Legal** Alignment and ROW must be determined. If it is determined that there will be partial takes, the Survey Consultant may need to prepare a Certified Survey, refer to *Chapter 4 Section 6: Certified Surveys for Real Estate Acquisition* for requirements.

MAPPING:

Mapping shall include the objects and features as needed to meet the requirements of the proposed design. The Survey Consultant's Work plan shall clearly identify mapping items that will be included in the project.

The following should be considered when determining the mapping needs for the project:

- Roadway improvements, curbs, sidewalks, signs, guardrail, light poles
- Intersection signalization equipment
- Building structures and improvements on property adjacent to project
- Drainage appurtenances including ditches, culverts, structures
- Surface manifestations of utilities and connectivity
- Terrain surface mapping
- Trees and brush classification
- Bridge structure elements, measurements, elevations, and underclearance dimensions
- Hydraulics Survey of watercourses
- Use of Static Terrestrial Laser Scanning(STLS)
- Use of Mobile Terrestrial LiDAR Survey(MTL)
- Use of Photogrammetric Mapping

TRAFFIC & SAFETY:

The Selected Survey Consultant, and the Selected Survey Consultant only, is advised to discuss Traffic Control scenarios with the local MDOT TSC Traffic and Safety Engineer prior to submitting a priced proposal. Traffic Control costs not included in the priced proposal will not be paid by MDOT.

The Survey Consultant must submit an advanced notice 5-21 days prior to beginning any work activity through the MDOT Construction Permit System (CPS) (http://www.michigan.gov/mdot/0,4616,7-151-9625 72410---,00.html).

The Survey Consultant must adhere to all work restrictions and traffic control requirements detailed in the MDOT Advanced Notice Permit.

The Survey Consultant must have a vehicle with markings/logo that identifies the company within sight distance of survey activity and must have a 360 degree flashing strobe light on the top of the vehicle whenever they are working on or near the road.

Traffic control on city streets and county roads is under the jurisdiction of the local authorities where the project is located.

COORDINATION WITH OTHER CONTRACTS IN THE VICINITY:

The Survey Consultant shall coordinate operations with contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).

MDOT maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the CIA. The Maintenance Division of MDOT and/or Contract Maintenance Agency will coordinate their operations with the MDOT Project Manager or Designate to minimize the interference to the Survey Consultant.

The Survey Consultant must contact the Operations Engineer at the local MDOT TSC for information regarding project coordination.

Other contracts or maintenance operations may occur during the life of the project. Contractors and other consultants involved with construction projects have similar requirements of cooperation and coordination of work as part of their projects as referenced in Article 104.08 of the 2012 Standard Specifications for Construction

(http://mdotcf.state.mi.us/public/specbook/2012/). Survey Consultants shall conduct their work with similar coordination efforts. The Survey Consultant will not be allowed claims for extra compensation or extensions of deadlines due to delays or failures of others to complete scheduled work.

POST SURVEY CLEAN-UP:

Once the survey is complete, all stakes must be removed from the MDOT median and ROW to aid the maintenance crews and adjacent property owners. All benchmarks and control points and their witnesses must remain in place.

DELIVERABLES:

The MDOT Survey QA/QC Checklist details the files that are to be submitted to MDOT (link: http://mdotwiki.state.mi.us/design/index.php/File:MDOT_Survey_Project_Checklist_2016.xlsm). This document shall be signed and certified by the Professional Surveyor responsible for the project QA/QC. Failure to use and include this document may result in the immediate return of the project portfolio for completion.

Files submitted to MDOT may vary by project type and scope, the following files **must always** be submitted to MDOT unless explicitly omitted in writing by the following MDOT personnel: MDOT Region Surveyor, MDOT Survey Consultant Manager or MDOT Supervising Land Surveyor:

- Survey Portfolio PDF (XXXXXX_Survey_20YY-MM-DD.pdf)
- Survey Information Sheet (S-XXXXXX_Survey_Info_Sheet_20YY-MM-DD.doc)
- Alignment and ROW CAD file (S-XXXXXX Align ROW 20YY-MM-DD.dgn)
- 3D project map (S-XXXXXX Survey 3D 20YY-MM-DD.dgn)

- When Mobile Terrestrial LiDAR (MTL) or Static Terrestrial Laser Scanning (STLS) techniques are used, three (3) copies of the entire point cloud must be delivered to the MDOT Survey Support Unit on media with appropriate storage capacity to contain all the data on one device.
- When Photogrammetric Mapping techniques are used, three (3) copies of the raw digital imagery, ortho-imagery and photogrammetrically extracted points cloud data must be delivered to the MDOT Survey Support Unit on media with appropriate storage capacity to contain all the data on one device.

<u>All</u> submitted files must be scanned and/or converted to one PDF format file. A Table of Contents in PDF format is required that has all PDF files bookmarked/linked so each place in the PDF archive can be accessed with a single click. Items required to be included in the Survey Portfolio PDF can be found in the QA/QC Checklist. Specified format files such as Microsoft Word and MicroStation GEOPAK must have separate access in native format outside of the PDF file.

At the completion of this survey for this project, legible copies of all field survey notes, all electronic data, and all research records obtained for this project will be considered the property of MDOT. Please include MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL" for all transmittals. A copy of this transmittal form must be sent to the MDOT Project Manager for Design and the MDOT Supervising Land Surveyor.

Electronic submittal only. Survey deliverables must be submitted using ProjectWise. For file naming conventions and upload locations, refer to Chapter 10 of the *MDOT Design Surveys Standards of Practice*.

Acceptance of this survey by the MDOT Project Manager and/or the MDOT Supervising Land Surveyor does not relieve the Survey Consultant of any liability for the content of the survey.

ATTACHMENT B

SCOPE OF SERVICE FOR UTILITY COORDINATION

The Consultant is directly responsible for all aspects of the project's utility coordination. The Consultant is expected to provide technical assistance to MDOT, utilities and other stakeholders regarding utility identification, project utility coordination and utility conflict resolution.

A utility is defined as any privately, publicly, municipal or cooperatively owned line, facility, or system for producing, transmitting, or distributing communication, cable television, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, or any other similar commodity, including any fire or police signal system or street lighting system.

MDOT shall -

- Provide a preliminary list of utilities, with contact information, that may have facilities located within the project limits. This list may not be 100% accurate and/or complete.
- Provide assistance, if necessary, in contacting utilities to obtain facility records.
- Provide Consultant with utility responses and facility records if utility information solicitation has been performed.
- Organize and host a kick-off meeting with Consultant and MDOT prior to Consultant beginning utility coordination services.

Consultant shall -

- Maintain a Utility Conflict Matrix* spreadsheet and deliver as the bi-weekly status report.
- Distribute form letters, plans, etc. as outlined in 14.16 (Request for Utility Information) and 14.26 (Distribution of Preliminary Plans to Utilities and Utility Coordination Meeting) of the MDOT Road Design Manual.
 - o Identify existing/proposed utility owners and facilities.
 - Collect and compile utility responses.
 - o Follow up with non-responsive utilities.
- Schedule and conduct utility meetings for the resolution of conflicts between utility facilities and proposed construction.
 - o Identify conflicts, discuss possible design modifications, develop utility relocation schemes, discuss reimbursable relocations, and discuss project scope and schedule.
 - o Identify the utility's design and construction contacts and ensure the plan's note sheet utility contact information is accurate.
 - o Record meeting minutes and distribute to all attendees.
- Schedule and conduct field meetings with individual utilities to resolve conflicts.
- Schedule and conduct meetings convened for the purpose of utility betterments.
- Ensure municipal utility relocations, betterments and reimbursements follow Chapter 9 of the MDOT Road Design Manual.

- Identify eligible reimbursable utility relocations, for public/private utilities, as outlined in 23 Code of Federal Regulations (CFR) Part 645 Subparts A and B Utilities and ensure 23 CFR Part 635.410 Buy America Requirements are met.
 - o Collect documentation to evaluate reimbursable utility relocations.
- Evaluate utility relocation plans for compatibility with the proposed project.
- Ensure utility relocation schedules do not impact the project schedule.
- Confirm utility relocation permit applications are submitted to the TSC.
- Prepare the "Utilities Status Report" (MDOT Form 2286) and "Notice to Bidders Utility Coordination" documents.
- Track and monitor utility relocation progress.

Deliverables (Provided to the TSC Utility Coordinator and Project Manager):

- Courtesy copies of all correspondence with the utilities
- Utility Conflict Matrix
- Utility coordination meeting minutes
- Reimbursable utility relocation documentation
- Utilities Status Report and Notice to Bidders Utility Coordination

* The Utility Conflict Matrix (UCM) is located on the http://www.trb.org/Main/Blurbs/166731.aspx website under Training materials > Prototype 1 - Stand-alone UCM. The UCM was developed as part of the Transportation Research Board's (TRB) second Strategic Highway Research Program (SHRP 2) Report S2-R15B-RW-1: Identification of Utility Conflicts and Solutions which provides concepts and procedures to identify and resolve utility conflicts. Tools described in the report include utility conflict matrices that enable users to organize, track, and manage conflicts that frequently arise.

ATTACHMENT C

Potential Project List

Control Section	Job Number	Location	Work Type
63052	128981	US-24, Vanguard to Elizabeth Lake Rd.	Sidewalk Extension/Installation
63000	202527	M-24/Greenshield – Bald Mtn Recreation	Pavement repairs and resurfacing of park's internal roads and parking lots
Various	Various	Various Maintenance Projects	Skip patching, culvert replacement and repairs, mastic and drainage improvements
63054	201928	I-75 at Dixie Hwy Carpool Lot	Resurfacing of parking lot
63071	201931	I-75 at M-15 Carpool Lot	Resurfacing of parking lot
63000	201932	M-24 at Oakwood Carpool Lot	Resurfacing of parking lot
63151	284308	M-1 at Railroad in Pontiac	Signal removal
63111	204357	I-75BL (Square Lake Rd), M-1 – I-75	Full depth concrete pavement repair
63000	201933	I-75 at Sashabaw Carpool Lot	Resurfacing of parking lot
63000	201935	I-75 at Grange Hall West Carpool Lot	Resurfacing of parking lot